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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/509,902	09/29/2004	Mark S. Vreeke	50066/50002	3129
22929	7590	03/27/2006	EXAMINER	
SUE Z. SHAPER, P.C. 1800 WEST LOOP SOUTH SUITE 1450 HOUSTON, TX 77027			WHITE, DWAYNE J	
			ART UNIT	PAPER NUMBER
			3745	

DATE MAILED: 03/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/509,902

Applicant(s)

VREEKE ET AL.

Examiner

Dwayne J. White

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 29 September 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 and 18-34 is/are rejected.
- 7) ☒ Claim(s) 13-17 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 September 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>9/29/04</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Drawings***

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the disks not being parallel as claimed in claim 34 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### *Specification*

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: Specifically, claims 21 and 23 recite “means for generating the power” and “step for generating less than 1 horsepower” respectively. While this appears to invoke 112 6<sup>th</sup> paragraph, the specification does not clearly set forth what constitutes the “means for” and “step for” that is being claim.

### *Claim Rejections - 35 USC § 112*

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 34 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Specifically, claim 34 states, “wherein the disks are not parallel.” While the specification states on page 3, lines 16-17, “However, the disks could be curved or bent, all or in a portion,” neither the Drawings nor the Specification provide enough information for one of ordinary skill the art to make or use claim invention without undue experimentation.

Claim 27 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Specifically, claim 27 recites the limitation of constructing the turbine using MEMS. While the specification recites using the techniques similar to those used in the construction of MEMS (page 8, lines 4-20), the specification does not disclose the actually MEMS (Micro electrical Machines) being used in the construction method. Therefore, one of ordinary skill in the art would not be able to make or use the claimed invention without undue experimentation.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-12, 26, 28, 1/30 and 1/31 are rejected under 35 U.S.C. 102(e) as being anticipated by Collins et al. (6,726,443). Collins et al. discloses a Tesla-type turbine constructed of silicon (column 4, lines 24-27) comprising: at least two disks 74/76 arranged in parallel, having a diameter less than 10 cm and an inter disk spacing of less than 1/20<sup>th</sup> of a disk diameter (Column 4, lines 40-50), in a chamber and defining a stator/rotor system of the turbine; the combustion chamber having a fluid inlet and outlet structured in combination with disks such

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that fluid radially and inwardly traverses an inter disk path between an inlet and an outlet; and a source of pressurized fluid in communication with the inlet (Column 8, lines 62-64) located at the peripherally with respect to the disk outer edge. The outlet 78 is located in a central portion of the disk assemble and provides an unobstructed fluid path for non-turbulent exhaust. The disk sides include protrusions 73 extending from the disk surface into the inter disk space. The Examiner wishes to point out that since the “Tesla air buckets” are disclosed in the specification as no more than spacers that serve a dual role of support and impeding fluid flow (page 7, line 3-10), the spacers of Collins et al. would inherently perform the same function since they are also placed within the fluid path.

In regards to claim 26, Applicant claims a matrix array of micro scale Telsa-type turbines structured in combination as a generator. Since the claim does not disclose any additional structure it is the position of the Examiner that Applicant is claiming multiple turbines:

*In re Harza, 274 F.2d 669, 124 USPQ 378 (CCPA 1960) (Claims at issue were directed to a water-tight masonry structure wherein a water seal of flexible material fills the joints which form between adjacent pours of concrete. The claimed water seal has a “web” which lies \*\* in the joint, and a plurality of “ribs” \*\* >projecting outwardly from each side of the web into one of the adjacent concrete slabs. <The prior art disclosed a flexible water stop for preventing passage of water between masses of concrete in the shape of a plus sign (+). Although the reference did not disclose a plurality of ribs, the court held that mere duplication of parts has no patentable significance unless a new and unexpected result is produced.).*

Follow the rationale set forth above in *In re Harza*, since Applicant discloses no new or unexpected result in regards to the array, it is the position of the Examiner that the array is not patentably distinct from the apparatus of Collins et al.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 18-25, 27 and 29-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Collins et al. in view of Pinkerton et al. (6,255,743). Collins et al. discloses all of the claimed subject matter including methods for constructing the turbine (Column 5, lines 1-10). Collins et al. does not disclose generating power electrically by movement of conducting regions through magnetic fields.

Pinkerton et al. teaches a Tesla type turbine having an output shaft 4 attached to a generator 8. Since a generator essentially operates by movement of conducting regions through a magnetic field to generate power and both Collins et al. and Pinkerton et al. disclose Tesla type turbines having output shafts, it would have been obvious at the time the invention was made to one of ordinary skill in the art to modify the turbine of Collins et al., with the teachings of Pinkerton et al., by attaching a generator to the output shaft of the apparatus for the purpose of generating power.

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## CONCLUSION

### *Allowable Subject Matter*

Claims 13-17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

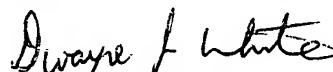
### *Contact Information*


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dwayne J. White whose telephone number is (571) 272-4825. The examiner can normally be reached on 7:00 am to 4 pm T-F and alternate Mondays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Look can be reached on (571) 272-4820. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DJW

  
Dwayne J White  
Patent Examiner  
Art Unit 3745

  
EDWARD K. LOOK  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3700  
3/20/06